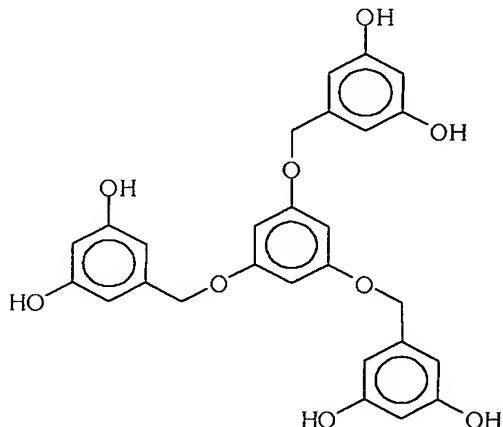


What is claimed is:

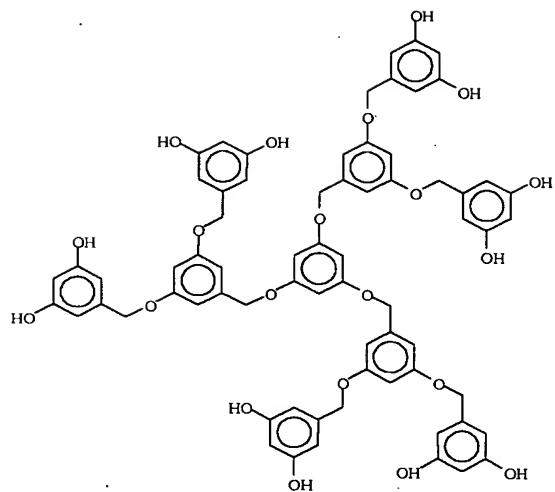
1. A non-linear optical material, comprising:  
organic chromophores coupled with ends of a polymer  
5 having a dendrimer structure based on ester linkages and/or  
ether linkages.

2. The non-linear optical material as recited in claim  
1, the polymer having a dendrimer structure is any one  
10 selected from a group of polymers, illustrated in Formulas 21,  
23, 28, 6, 12, 16, 29, 8, 14, 18, 30, 25, 27 and 31:

Formula 21

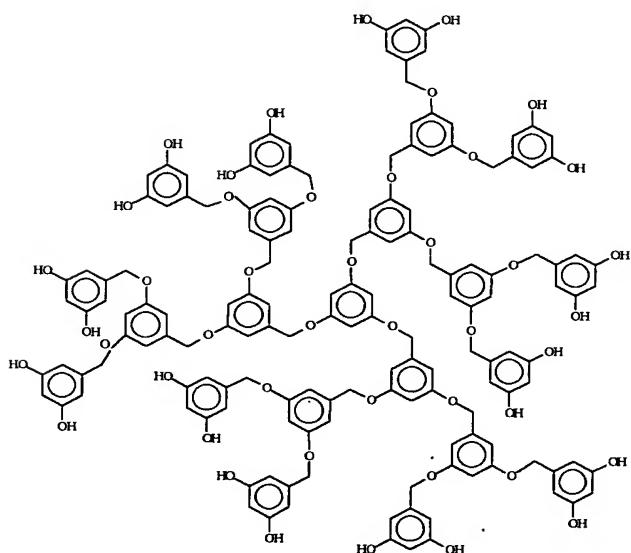


Formula 23

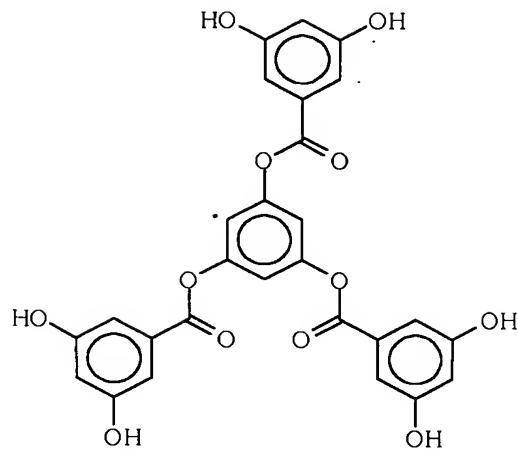


5

Formula 28

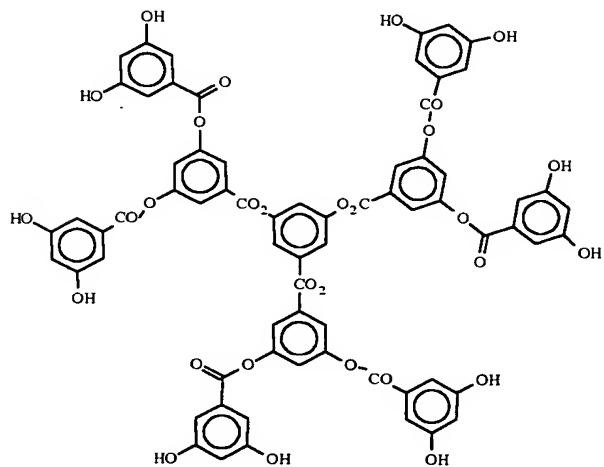


Formula 6



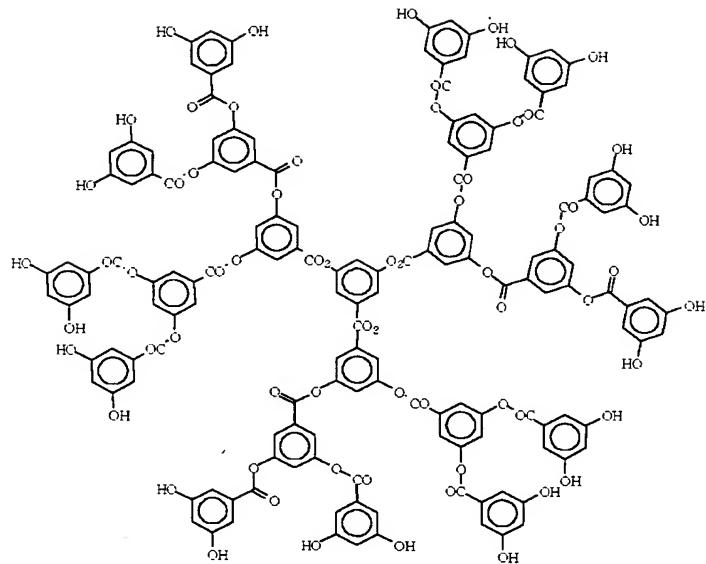
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Formula 12



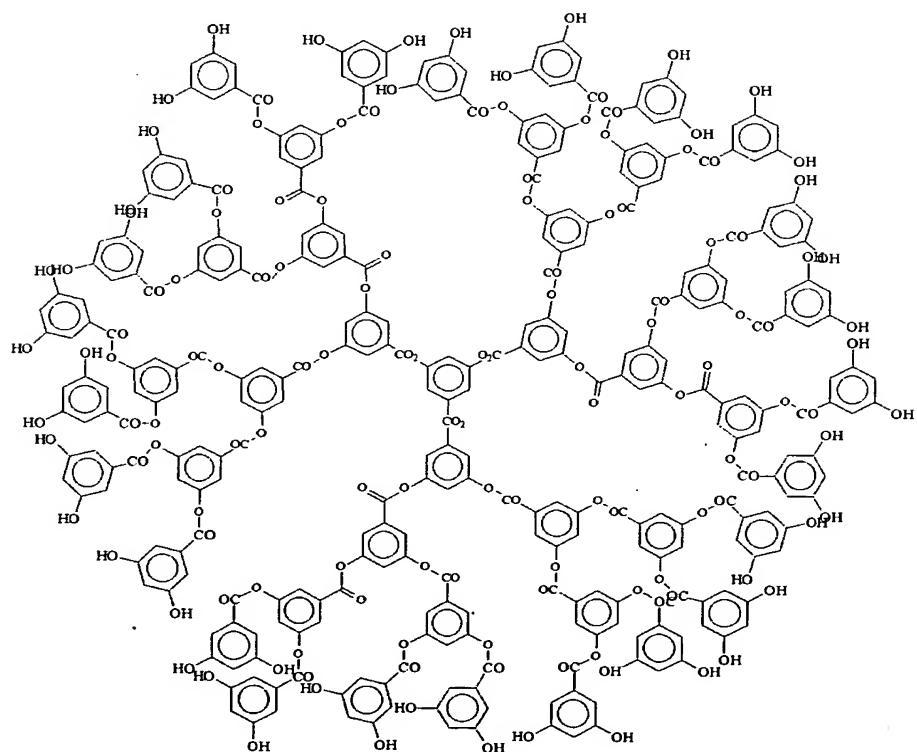
10

Formula 16

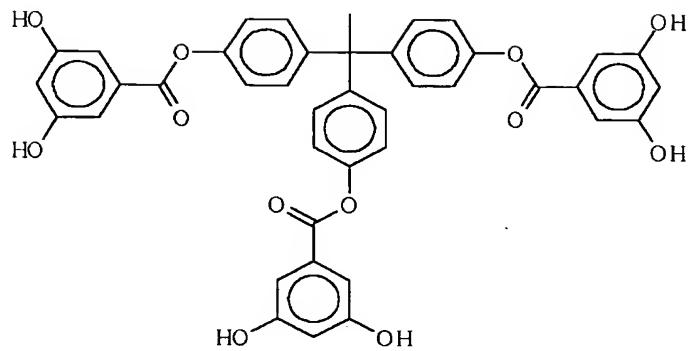


5

Formula 29

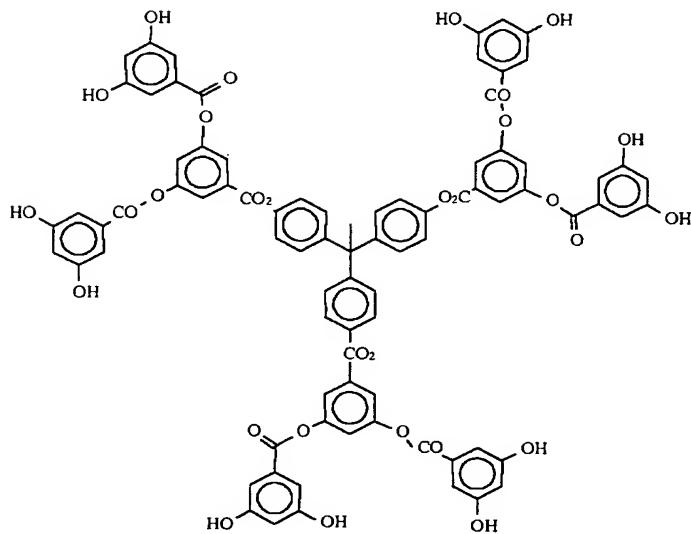


### Formula 8



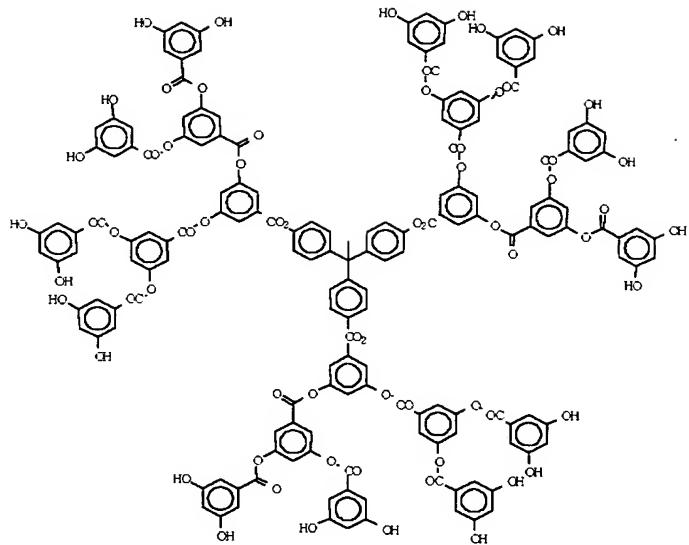
51

Formula 14



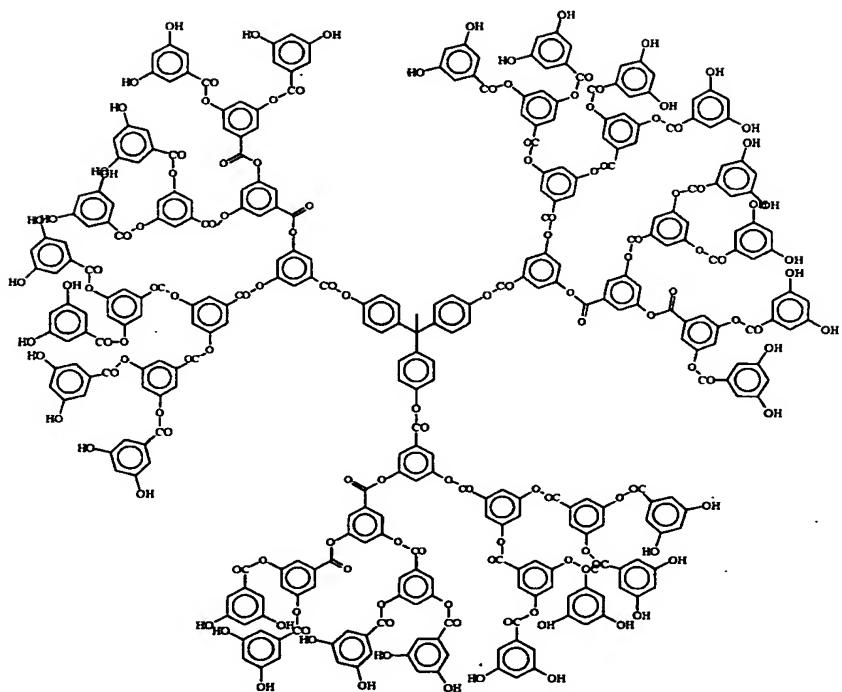
10

Formula 18

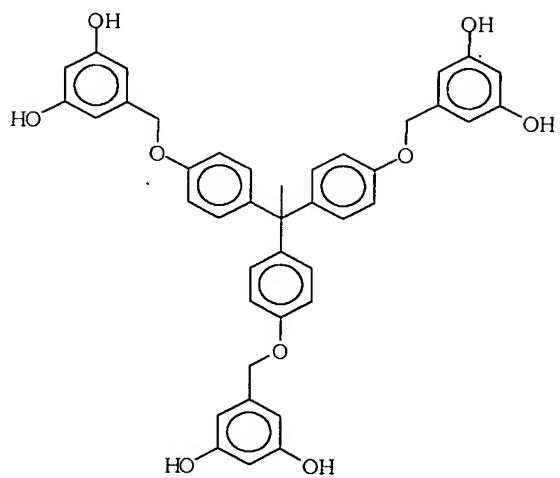


5

Formula 30

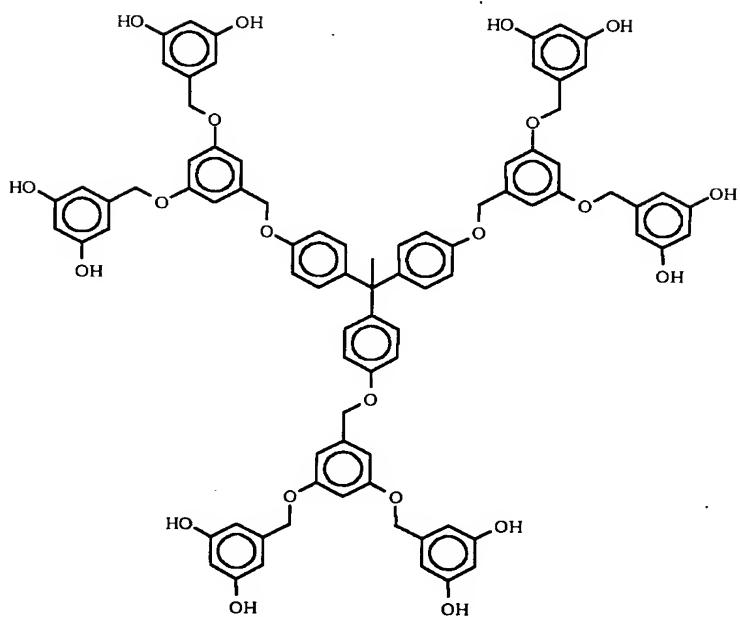


Formula 25



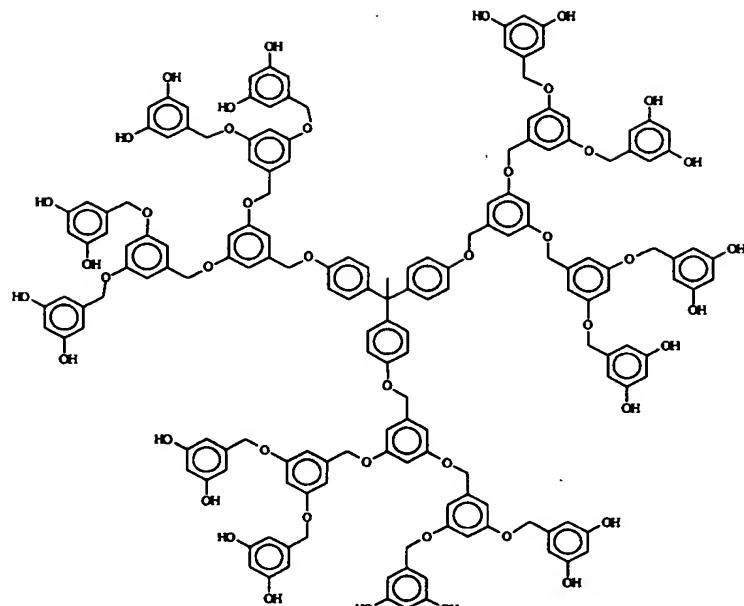
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Formula 27



10

Formula 31

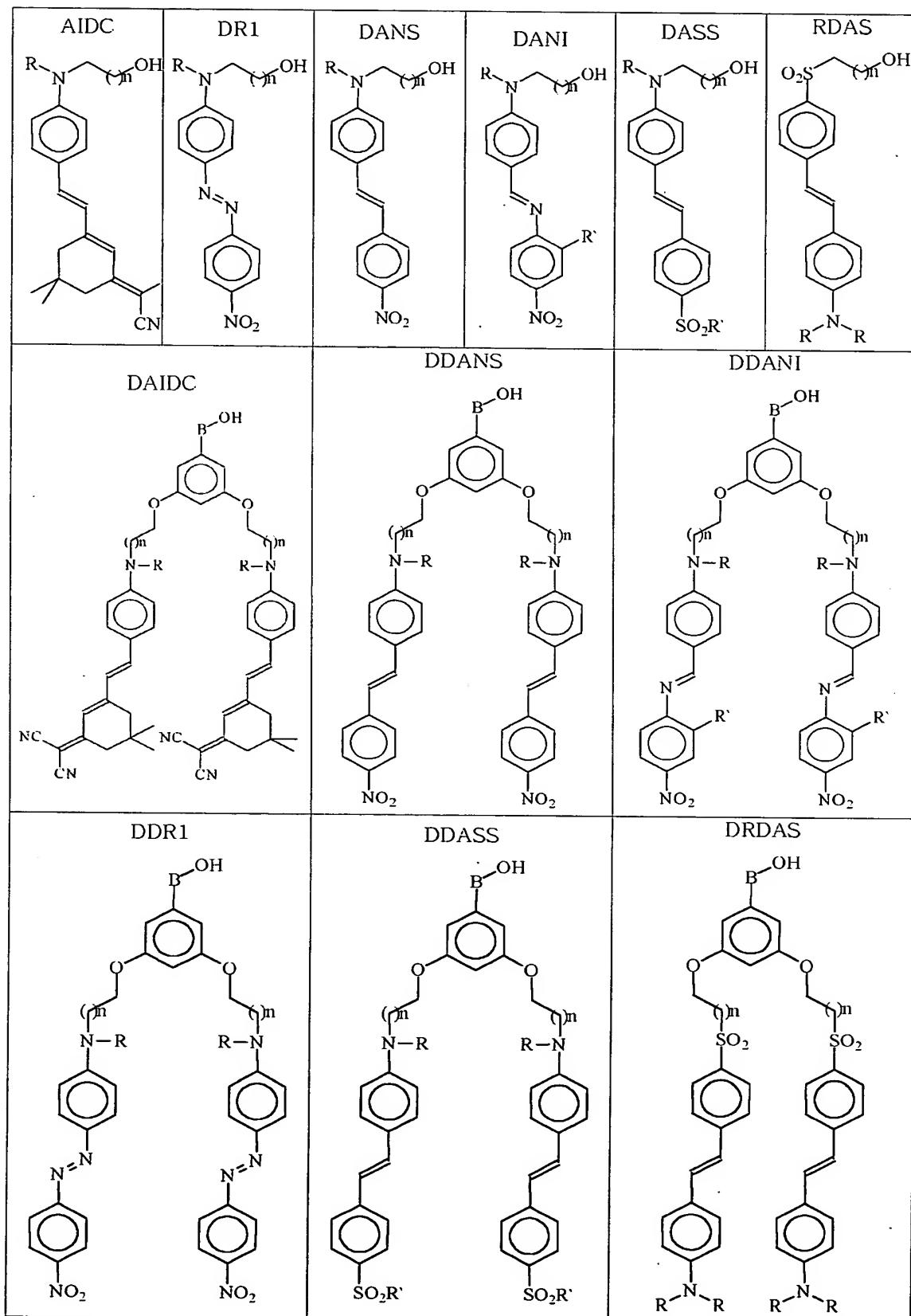


5

3. The non-linear optical material as recited in claim 1, wherein the organic chromophores are selected from Table 1 shown as:

10

Table 1



wherein the R and R' are H, Ph or an alkyl group having 1 to 6 carbon atoms;

n is an integer in a range of 1 to 11; and

B is an alkyl group having 1 to 6 carbon atoms or a COOA 5 where A is an alkyl group having 1 to 6 carbon atoms.

4. The non-linear optical material as recited in claim 1, wherein part of the ends of the polymer having a dendrimer structure is coupled with non-chromophores.

10

5. The non-linear optical material as recited in claim 4, wherein the non-chromophores are aliphatic hydrocarbons or aromatic hydrocarbons which have 1 to 16 carbon atoms.

15 6. The non-linear optical material as recited in claim 5, wherein the aromatic hydrocarbons have chemical functional groups connected thereto, the chemical functional groups inducing thermal and optical chemical reactions.